

1/103

Figure 1

AAGGAGCACC ACGAAAACGC CCCAACTGGT GGGGCGTAGG CCGTGAGGGG TTCTTGTCTG TAGTGGGCGA  
GAGCCGGGTG CATGACAACA AAGTTGGCCA CCAACACACT GTTGGGTCTT GAGGCAACAC TCGGACTTGT  
TCCAGGTGTT GTCCCACCGC CTTGGTGGTG GGGTGTGGTG TTTGAGAACT GGATAGTGGT TGCAGCATC  
AATGGATACG CTGCCGGGCTA GCGGTGGCGT GTTCTTTGTG CAATATTCCT TGGTTTTTGT TGTGT

(SEQ ID NO 76)

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Figure 2

AAGGAGCACC ACGAAAAGCA CCCCAACTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCTCT GTAGTGGACG  
GGGGCCGGNT GCGCAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCCGTC  
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA  
GATGAGCGCA TGGTCTTCGT GGCCGGCGGT CATCGAAATG TGTAATTCTC TCCTTAACTC TTGTGTGT

(SEQ ID NO 77)

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Figure 3

AAGGAGCACC ACGAAAAGCA CCCCAACTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCGTCT GTAGTGGACG  
GGGGCCGGGT GCGCAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCCGTC  
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATGG ATAGTGGTTG CGAGCATCTA  
GATGAGCGCA TGGTCTTCGT GCGCGGCGTT CATCGAAATG TGTAATTCT TTTTAACTC TTGTGTGT

(SEQ ID NO 78)

4/103

Figure 4

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AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCGTCT GTAGTGGACG
GGGGCCGGNT GCACAAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACACAC TCGGTCGATC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGT TGTGTAATTG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCTTGT GGCTGATGCG CTCGTCGAAA TGTGTAATTG CTTCTTTGGT GTNTGTGTGT
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(SEQ ID NO 79)

5/103

Figure 5

AAGGAGCACC ACGAAAAGCA TCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AAAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTGG CGAGCATCTA  
GATGAGCGCG TAGTCCCTTG TGGCTGATGC GTTCATCAAA ATGTGTAATT TCTTTTGG TTTNTGTGTG

T

(SEQ ID NO 80)

6/103

Figure 6

AAGGAGCAC	ACGAAAGCA	CTCCAATTGG	TGGGGTGCGA	GCCGTGAGGG	GTTCCTGCT	GTAGTGGACG
GGGCGCGGT	GCACAACAGC	AAATGATTGC	CAGACACACT	ATTGGGCCCT	GAGACAACAC	TGGGTCGATC
CGTGTGGAGT	CCCTCCATCT	TGGTGGTGGG	GTGTGGTGTT	TGAGTATTGG	ATAGTGGTTG	CGAGCATCTA
GATGAGCGCA	TAGCCCTTGC	GGCTGATGCC	TTCGNCGAAA	TGTGTAATT	CTTCTCTGGT	TTCTGTGTGT

(SEQ ID NO 81)

7/103

Figure 7

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
GNAGCCGGGT GCACAAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAGTATTGG ATAGTGGTTG CGAGCATCTA  
GATGAGCGCG TAGTCCTTCG TGGCTGATGC GTTCATCGAA ATGTGTAATT TCTTCTTTGG TTTTGGGTGT

GT

(SEQ ID NO 82)

8/103

Figure 8

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AAGGAGCACC ACGAAAAGCA CTCCAAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCTCT GTAGTGGACG
GGGGCCGGGT GCACAACAGC AAATGATCGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGT TTGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCTTTG GGGCTGATGT GTTTCATCAA AATGTGAAT TTCCTTTTNG GTTTTNGTGT
GT
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(SEQ ID NO 83)



9/103

Figure 9

AAGGAGCACCC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
GGAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGT TGAGTATTGG ATAGTGGTTG CGAGCATCTA  
GATGAGCGCG TAGTCCTTCG TGGCTGATGC GTTCATTGAA ATGTGTAATT TCTTCTCTGG TTTTGTGTG

T

(SEQ ID NO 84)

10/103

Figure 10

AAGGAGCACC	ACGAAAAGCA	CTCCAATTGG	TGGGGTGCGA	GCCGTGAGGG	GTCCCGTCT	GTAGTGGACG
GGGGCCGGGT	GCACAACAGC	AAATGATTGC	CAGACACACT	ATTGGGCCCT	GAGACAACAC	TCCGTCGATC
CGTGTGGAGT	CCCTCCATCT	TGGTGGTGGG	GTGTGGTGTT	TGAGTATTGG	ATAGTGGTTG	CGAGCATCTA
GATGAGCGCA	TAGTCCCTTGT	GGCTGATGCG	CTCGTCGAAA	TGTGTAATT	CTTCCTTGGT	TTTTTGTGTGT

(SEQ ID NO 85)

11/103

Figure 11

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCGTCT GTAGTGGACG  
GGGGCCGGGT GCGCAACAGC AAATGATGTC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGAGT CCC'TCCATCT TGGTGGTGGG GTGTTGGTGT TTGAGTATTG GATAGTGGTT GCGAGCATCT  
AGATGAGCGC GTAGTCCTTG TGGCTGATGC GTTCGTCGAA ATGTGTAATT TC'TTCTTGG GT'TTTTGTGT

GT

(SEQ ID NO 86)

12/103

Figure 12

AAGGAGCACC ACGAAAAGCA CCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
GNAGCCGGNT GCGCAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGNCGATC  
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTNGTGT TTAGTATTGG ATAGTGGTTG CGAGCATCTA  
GATGGGCGCG TAGTCCTTTG TGA CTGATGC GTTCATCAAA ATGTGTAATT TCTTTTGTGN NTTNGTGTG

T

(SEQ ID NO 87)

13/103

Figure 13

AAGGAGCACC ACGAAAAGCA CTCCAATGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
GGAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGGT TGAGTATTGG ATAGTGGTTG CGAGCATCTA  
GATGAGCGCA TAGTCCTTTG TGGCTGACGC GTTCATCGAA ATGTGTAATT TCCTCTTTGG TTTTGTGTG

T

(SEQ ID NO 88)

14/103

Figure 14

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGANGG GTTCCCGTCT GTAGTGGACG  
GGGGCCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA  
GATGAGCGCA TAGTCCTTAG GGCTGATGCG TTCGTGCGNAA TGTGTAATTT CTTCTTTGGT TTTTGTGTGT

(SEQ ID NO 89)

15/103

Figure 15

AAGGAGCAC ACGAAAAGCA TCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AAAACCGGGT GCACAACAGC AAATAATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGTGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATATTGG ATAGTGGTTG CGAGCATCTA  
GATGAACGCG TAGTCCCTTCG TGGCTGACGT GTTCATCGAA ATGTGTAATT TCTTNTNTTA ACTCTTGTGT

GT

(SEQ ID NO 90)

16/103

Figure 16

AAGGAGCACC ACGAAAAGCA CCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
GGAGCCGGGT GCACAAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCAGTC  
CGTGTGGTGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATATTGG ATAGTGGTTG CGAGCATCTA  
GATGAACGCG TAGTCCTTGT GACTGACGTG TTCATCGAAA TGTGTAATT CTTTCTAAC TCTTGTGTGT

(SEQ ID NO 91)



17/103

Figure 17

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AAAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGAAC  
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATAATGG ATAGTGGTTG CGAGCATCTA  
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATAT CTTCTCTGGT TTTCGGTGTG

T

(SEQ ID NO 92)

18/103

Figure 18

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AAAACCGGNT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGT TTGATATTGG ATAGTGGTTG CGAGCATCTA  
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATT CTTTTNNAC TCTTGTGTGT

(SEQ ID NO 93)

19/103

Figure 12

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AAAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGAAC  
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA  
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATTT CTTCTTTGGT TTTNGTGTGT

(SEQ ID NO 94)

20/103

Figure 20

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AAAACCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGAGT CCCTCCATCT TGGTGGTGG GTGTGGTGT TGAGTATTGG ATAGTGGTGG CGAGCATCTA  
GATGAACGCG TAGTCCTTCG NCGNCNGCGT GTTCATCGAA ATGTGTAATT TCTNTTNTAA CTCTNGTGTG

T

(SEQ ID NO 95)

21/103

Figure 21

AAGGAGCACG ACGAAAAGCA TCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AAAACCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA  
GATGAACGCG TAGTCCCTTCG GGGCCGGCGGT GTTCATCGAA ATGTGTAATT TCCTTTTAA CTCTTGTGTG

T

(SEQ ID NO 96)

22/103

Figure 22

AAGGAGCACC ACGAAAAGCA CTTTCANTTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AAAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGAAC  
CGTGTGGAGT CCCCTCCATCT TGGTGGTGGG GTGTGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA  
GATGAACGCG TGGTCTTCAT GCGCGGCGTG TTCATCGAAA TGTGTAATTT CTTCTTTTAAAC TCTTGTGTGT

(SEQ ID NO 97)

23/103

Figure 23

AAGGAGCACC ACGAAAAGCA CTTC AATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AAAACCGGGT GCACAACAGN AATGATGTC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA  
GATGAACGCG TGGTCTTCAT GGCCNGCGTG TTCATCGAAA TGTGTAATT CTTTTTAAAC TCTTGTGTGT

(SEQ ID NO 98)

24/103

Figure 24

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AAAACCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC  
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATAATGG ATAGTGGTTG CGAGCATCTA  
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATTT CTTTTTTAAC TCTTGTGTGT

(SEQ ID NO 99)



25/103

Figure 25

AAGGAGCACC ACGAAAAGCA CCCCACCTGG TGGGGTGCGA GCCGTGAGGG GTCCCTCGCCT GTAGTGGGCG  
GGGGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGGCAACAC TCGGCTCGTT  
CTGAGTGGTG TCCCTCCATC TTGGTGGTGG GGTGGTGGTGT TTGAGTATTG GATAGTGGTT GCGAGCATCT  
AAACGGATGC GTGGCCGGCA ACGGTGGCGT GTTCGTTGAA ATGTGTAATT TCTTTTGGG TTTTGTGTG

T

(SEQ ID NO 100)

26/103

Figure 26

AAGGAGCACC ACGAAAAGCA TCCCAACAAG TGGGGTGCAA NCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AAAGCCGGGT GCACGACAAC AAGCAAAGCC AGACACACTA TTGGGTCCCTG AGGCAACACT CCGGCTCTGT  
TCGAGAGTTG TCCCACCATC TTGGTGGTGG GGTGTGGTGT TTGAGAAATTG GATAGTGGTT GCGAGCATCA  
AATGGATGCG TTGCCCTACG GGAGCGGTGT TCTTTTGTC AATTATTTC TTGGGTTTTT GTGT

(SEQ ID NO 101)

27/103

Figure 27

AAGGAGCACC ATTTCCCGAGT CGATGAACATA GGGAACATAA AGTAGGCATC TGTAGTGGAT ATCTACTTGG  
TGAATATGTT TTGTAAATCC TGTCCACCCC GTGGATGGGT AGTCGGCAAA ACGTCGGACT GTCATAAGAA  
TTGAAACGCT GGCACACTGT TGGGTCCTGA GGCAACACGT TGTGTTGTCA CCCTGCTTGG TGGTGGGGTG  
TGGACTTTGA CTTCTGAATA GTGGTTGCGA GCATCTAAAC ATAGCCTCGC TCGTTTTTCGA GTGGGGGCTGG  
TTTTGCAATT TTA

(SEQ ID NO 102)

28/103

Figure 28

AAGGAGCACC ATTTCCCAGT CCGATGAACCT AGGGAACATA AAGTAGGCAT CTGTAGTGGG TATCTACTTG  
GTGAATATGT TTTGTAAATC CTGTCCACCC CCGTGGATGG GTAGTCGGCA AAACGTCGGA CTGTCATAAG  
AATTGAAACG CTGGCACACT GTTGGGTCCT GAGGCAACAC GTTGTGTTGT CACCCTGCTT GGTGGTGGGG  
TGTGGACTTT GACTTCTGAA TAGTGGTTGC GAGCATCTAA ACATAGCCTC GCTCGTTTTC GAGTGAGGCT  
GGTTTTTGCA ATTTTA

(SEQ ID NO 103)

29/103

Figure 29

AAGGAGCACC ACGAAGAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTCATCGTCT GTAGTGGACG  
AAGACCGGGT GCACGACAAC AAGCTAAGCC AGACACACTA TTGGGTCCCTG AGGCAACACCC C'TCGGGT'GCT  
GTCCCCCCCAT CT'TGGTGGTG GGGTGTGGTG TTTGAGAA'TT GGATAGTGGT TGCAGGCATC AAAATGTATG  
CGTTGTGCGT CTCGGCAACG TGTTCTTT'TT GTGCAATTTA TTCTTTTGGTT TTTGTAGTGT TTGT

(SEQ ID NO 104)

30/103

Figure 30

AAGGAGCACC	ACGAAGAGCA	CTCCAATTGG	TGGGGTGCGA	GCCGNGAGGG	GTCATCGTCT	GTAGTGGACG
AAGACTGGGT	GCACGACAAC	AAAGCAAGCC	AGACACACTA	TTGGGTCCTG	AGGCAACACC	CTCGGGTGCT
GCCCCCCTCCAT	CTTGGTGGTG	GGGTGTGGTG	TTTGAGAACT	GGATAGTGGT	TGCGAGCATC	AAAAATGTAT
GCGTTGTCGT	TCGCGACAAC	GTGTTCTTTT	TGTGCAATTT	TAATTCTTTT	GGTTTGGTA	GTGTTTGT

(SEQ ID NO 105)

31/103

Figure 31

AAGGAGCACC ACGAGAAGCA CTCCAATTGG TGGGGTGCAA GCCGTGAGGG GTCATCGTCT GTAGTGGACG  
AAGACCGGGT GCACGACAAC AAGCAAAAGCC AGACACACTA TTGGGTCCTG AGGCAACACC CTCGGGTGCT  
GTCCCCCCAT CTTGGTGGTG GGGTGTGGTG TTTGAGAACT GGATAGTGGT TGCAGGCATC AAAATGTATG  
CGTTGTGCTT CGCGGCAACG TGTTCCTTTT GTGCAATTTT TATTCCTTTG TTTTGTAGT GTTTGT

(SEQ ID NO 106)

32/103

Figure 32

AAGGAGCACC ACGAAAAGCA CCCCAATTGG TGGGGTGCAA GCCGTGAGGG GTTCCCGCCT GTAGTGGGCG  
GGCCCGGGTG CGCAACAGCA AATGATTGCC AGACACACTA TTGGGGCCCTG AGGCAACACT CGGATCGATT  
GAGTGCTTGT CCCCCCATCT TGGTGGTGGG GTGTGGTGTT TGAGAACTGG ATAGTGGTTG CGAGCATCTA  
AATGAACGCA CTGCCGATGG TGGTGTGTC GTTTGTGTA ATTTATTCT TTGGTTTTTG TGTTTGT

(SEQ ID NO 107)



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Figure 33

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTNAGGG GTTCTCGTCT GTAGTGGATG  
GCAGCCCGGT GCACANCAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAAACAC TCGGTCAGTC  
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGNGTT TGAGTATTGG ATAGTGGTGG CGANCACTA  
GATGAACGGG TAGTCCTCNG TGGCTGACGT GTTCATCAAA ATGTGTAATT TCTTTTANGG GTTTNGGGTGT

CT

(SEQ ID NO 108)

34/103

Figure 34

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGNGAGGG GTTCTCGCCT GTAGTGGNCG  
AGGGCCGGAT GCACAACAAC ACATGATTGC CAGACACACT ATTGGGCCCT GANACAACAC TCGGCCAGTC  
CGTGTGGTGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATATNGG ATAGTNGTGT NGANCATCTA  
AACGGCTGCG TNGNCNNGAA CGGTGGCGTG TTCGNTAAAA TGTGTAATTT CTTTNNNGGT TTGGGTGTNT

(SEQ ID NO 109)

35/103

Figure 35

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGCCT GTAGTGGGCG  
ANGGCCGGGT GCACAACAAC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGCCAGTC  
CGTGTGGTGT CCCNCCATCT TGGTGGTGGG GTGTGGTGT TGAGTATTGG ATAGTGGTTG CGAGCATCTA  
AANGNTGCG TTGCCGNNAN CNGTGGCGTN TTCGNTAAAA TGTGTAANTT CTTTNNGGT TTGTGTGTGT

(SEQ ID NO 110)

36/103

Figure 36

ATCGAAGATC CCGGCTTCTT CATAAGCTCC CACACGAATT GCTTGATTCA CTGGTTAGAC GATTGGGTCT  
GTAGCTCAGT TGGTTAGAGC GCACCCCTGA TAAGGGTGAG GTCGGCAGTT CGAATCTGCC CAGACCCACC  
AATTGTTGGT GTGCTGCGTG ATCCGATACG GGGCCATAGC TCAGCTGGGA GAGCGCTGC TTTGCACGCA  
GGAGGTCAGG AGTTCGATCC TCCTTGGCTC CACCATCTAA AACAAATCGTC GAAAGCTCAG AAATGAATGT  
TCGTGGATGA ACATTGATTT CTGCTCTTTG CACCAGAACT GTTCTTTAAA AATTCCGGTA TGTGATAGAA  
GTAAGACTGA ATGATCTCTT TCACTGGTGA TCATTCAAGT CAAGGTAAAA TTTGCGAGTT CAAGCGCGAA  
TTTTTCGGCGA ATGTCGTCTT CACAGTATAA CCAGATTGCT TGGGGTTATA T

(SEQ ID NO 111)

Figure 37

ATCGAAGACA TCAGCTTCTT CATAAGTATC CACACGAATT GCTTGATTCA TAGTCGAACG AATGCTGTAA  
CGCGACCCGT GTTATAGGTC TGTAGCTCAG TTGGTTAGAG CGCACCCCTG ATAAGGGTGA GGTGGCAGT  
TCAAAATCTGC CCAGACCTAC CAATTGCTTG GTCGAGAAGA ATACGGGGCC ATAGCTCAGC TGGGAGAGCG  
CCTGCCCTGC ACGCAGGAGG TCAGCGGTTT GATCCCGCTT GGCTCCACCA CTCCTCTCGTG TTGCGGTGAG  
TGTTAAAGAG TTCAGAAATG ATGCCGCTTC AGGTTTGTCC TGTTCAGTGC TGATTTCTGG TCTTTTGACC  
GGTACGAAA TCGTTCCTTA AAAATTGGA TATGTGATAG AAGTGACTGA TTAATTGCTT TCACCTGGCAA  
TTGATCTGGT CAAGGTAAA TTTGTAGTTC TCAAGACGCA AATTTTCGGC GAATGTCGTC TTCACGATTG  
AGACAGTAAC CAGATTGCTT GGGGTTATAT

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(SEQ ID NO 112)

38/103

Figure 38

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ATCGAAGACA CCGGCTTCGT CATAAGCTCC CACACGAATTI GCITTGATTTCA CTTGCCGAAAG GCGATTTGGGT  
TTAGACCCGA GAGTAACGAT TGGGTCGTGTA GCTCAGTTGG TTAGAGCGCA CCCCTGATAA GGGTGAGGGTC  
GGCAGTTCGA ATCTGCCCAG ACCCACC AAT CGAAGGGCC ATAGCTCAGC TGGGAGAGCG CCTGCTTTTGC  
ACGCAGGAGG TCAGCGGTTT CAGTCCGCTT GGCTCCACCA TTAACCTCTAG TCGCCGAAAG CTCAGAAAATG  
AGTGTTTACC AGGATGAGGT TGATTGCCCTG GGTGGAACAT TGATTTCTGG ACTTTGCGCC AGAACTGTTC  
TTTAAAAAAT TGGGTATGTG ATAGAAGTAG ACCGATGTGT TGCTTTTCACT GGCAGCATGT CGCGTCAAGG  
TAAAAATTGC GTGTCTCTA TGCAAAATTT CGGCGAATGT CGTCTTTCACG TTATAGACAG TAACCAGAT  
GCTTGGGGTT ATAT
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(SEQ ID NO 113)

39/103

Figure 39

ATCGAAGACT TCAGCTTCTT CATAAGTTCC CACACGAATT GCTTGATTCA CTTGCGAAAA GCGATTGGGT  
TGAGACCCGA GAGTGACGAT TGGGTCTGTA GCTCAGTTGG TTAGAGCGCA CCCCTGATAA GGGTGAGGTC  
GGCAGTTCGA ATCTGCCCCAG ACCCACC AAT TGTCGGGATG GCCAGTGTCA AATGGGGCCA TAGCTCAGCT  
GGGAGAGCGC CTGCTTTGCA CGCAGGAGGT CAGGAGTTCCG ATCCTCCTTG GCTCCACCCAT CAACTCACGA  
TCGCTGAAAG CTCAGAAATG AACATTTGTA GTTCAATGTT GATTCTGGT CTTTGGGCCA GAACTGTTCT  
TTAAAAATT GGGTATGTGA TAGAAGTGAC TAACAGCGTG TTTCACGTGA CGTTGTAAAT CAAGGCAAAA  
TTTGCGAGTT CAAGCGCGAA TTTTCGGCGA ATGTCGTCTT CACGTTACGA ATCTATAACC AGATTGCTTG  
GGTTATAT

(SEQ ID NO 114)

40/103

Figure 40

ATCGACGACA	TCAGCTGTCT	CATAAGCTCC	CACACGAATT	GCTTGATTCA	TTGAAGAAGA	CGATTAGGTT
AGCAACCTTC	GATTGGGTCT	GTAGCTCAGT	TGGTTAGAGC	GCACCCCTGA	TAAAGGTGAG	GTCGGCAGTT
CGAATCTGCC	CAGACCCACC	AATTGCTGG	GGCCATAGCT	CAGCTGGGAG	AGCGCCTGCC	TTGCACGCAG
GAGGTCAGCG	GTTCGATCCC	GCTTGGCTCC	ACCACCCCGC	TTGCCAGTTT	GTCAAAGCTT	AGAAATGAAT
ATTCCGCTCG	AATATTGATT	TCTGAACTTT	ATCAGAATCG	TTCTTTTAAA	ATTGCGGTAT	GTGATAGAAA
GATAGACTGG	ACAGCACTTT	CACCTGGTGTG	TGTTTCAGGCT	AAGGTAAAAT	TTGTGAGTAA	TTACAAGTTT
TCGGCGAATG	TTGTCCTTCAC	AGTATAACCA	GATTGCTTGG	GGT'T'A'A'A'		

(SEQ ID NO 115)



41/103

Figure 41

TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTTCCTCTGTT TGTTCAGTTT TGAGAGGTTA ATTCTTCTCT  
ATACTGTTTG TTCCTTGAAA ACTAGATAAG AAAGTTAGTA AAGTTAGCAT AAATAGGTAA CTATT'TATGA  
CACAAAGTAAC CGAGAATCAT CTGAAAGTGA ATCTTTCATC TGATTGGAAG TATCATCGCT GATACGAAAA  
ATCAGAAAAA CAACCTTTAC TTCATCGAAG TAAATT

(SEQ ID NO 116)

42/103

Figure 42

CTAAGGAAA GGAACCTGT GAGTTTTCGT TCTTCTCTAT TTGTTTCAGTT TTGAGAGGTT AGTACTTCTC  
AGTATGTTTG TTCTTTGAAA ACTAGATAAG AAAGTTAGTA AAGTTAGCAT AGATAAATTA TTATTTATGA  
CACAAAGTAAC CGAGAATCAT CTGAAAGTGA ATCTTTCATC TGATTGGAAG TATCATCGCT GATACGGAAA  
ATCAGAAAA CAACCTTTAC TTCGTAGAAG TAAATT

(SEQ ID NO 117)

43/103

Figure 43

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TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTTCCTCTGTT TGAGAGGTTA TTACTTCTCT
GTATGTTTGT TCTTTGAAAA CTAGATAAGA AAGTTAGTAA AGTAGTGTA CTATTTATGA
CACAAAGTAAC CGAGAATCAT CTGAAAAGTGA ATCTTTCATC TAATTCGACG TATCATCGCT GATACAGACA
ATTAGAAAAA CAACCTTTAC TTCGACGAAG TAAATT
```

(SEQ ID NO 118)

44/103

Figure 44

GGCCTATAGC TCAGCTGGTT AGAGCGCACC CCTGATAAGC GTGAGGTCGA TGGTTCGAGT CCATTTAGGC  
CCACTTTTTC TTTCTGACAG AAGAAACACT GTATAACCTA TTTAAGGGGC CTTAGCTCAG CTGGGAGAGC  
GCCTGCTTTG CACGCAGGAG GTCAGCGGTT CGATCCCGCT AGGCTCCACC AAAATTGTTC TTTGAAAACT  
AGATAAGAAA GTTAGTAAAG TTAGCATAAA TAGGTAACCTA TTTATGACAC AAGTAACCGA GAATCATCTG  
AAAGTGAATC TTTTCATCTGA TTGGAAGTAT CATCGCTGAT ACGAAAAATC AGAAAAACAA CCTTTACTTC  
ATCGAAGTAA ATT

(SEQ ID NO 119)

45/103

Figure 45

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TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTTCCTCTATT TGATCAGTTT TGAGAGGTTA CTCTCTTTTA
TGTCAGATAA AGTATGCAAG GCACATATGCT TGAAGCATCG CGCCACTACA TTTTGTACGG GCCTATAGCT
CAGCTGGTTA GAGCGCACGC CTGATAAGCG TGAGGTCGAT GGTTGAGTC CATTTAGGCC CACTTTTCT
TTCTTGACATA AGAAATACAA ATAATCATAC CCTTTTACGG GGCTTTAGCT CAGCTGGGAG AGCGCCTGCT
TTGACACGCG GAGGTCAGCG GTTCGATCCC GCTAGGCTCC ACCAAAATTG TTCTTTGAAA ACTAGATAAG
AAAGTTAGTA AAGTTAGCAT AGATAATTAA TTATTTATGA CACAAGTAAC CGAGAAATCAT CTGAAAAGTGA
ATCTTTCATC TGATTGGAAG TATCATCGCT GATACGGAAA ATCAGAAAAA CAACCTTTAC TTTCGTAGAAAG
TAAATT
```

(SEQ ID NO 120)

Figure 46

TAAGGAAAAG GAAACCTGTN AGTTTNCGTN CTTCTCTGTT TGTNCAGTTT TNAGAGGTTA CTCTCTTTNA  
TGTCAGATAA AGTACGCACG GCACGTTGCC TTGGGCAAG AGCCACTACA TTAATTGACGG GCCTA'TAGCT  
CAGCTGGTTA GAGCGCACGC CTGATAAGCG TGAGGTCGAT GGTTCGAGTC CATTAGGCC CACTTTTCT  
TTCTGACAGA AGAAATCATT TGCACATCCT ATTAATAAGG GNCCTTAGCT CAGCTGGGAG AGCGCCTGCT  
TTGCACGCAG GAGGTCAGCG GTTCGATCCC GCTAGGCTCC ACCCAAATTT GTTCTTTGAA AACTAGATAA  
GAAAGTTAGT AAAGTTAGCA TAAGTAGTAT AACTATTTAT GACACAAGTA ACCGAGAAATC ATCTGAAAGT  
GAATCTTTCA TCTAATTCGA CGTATCATCG CTGATACAGA CAATTNGAAA AACAACTTTT ACTTCGACGA  
AGTAAATTT

(SEQ ID NO 121)

47/103

Figure 47

TAAGGATAAG GATAACTGTC TTAGGACGGT TTGACTAGGT TGGCAAGCG TTTTAAAT CTTGTATCT  
ATTCCTTTG CATGTTAAG CGTGTTC AAAACATTAA GTTACGATC AAGTATGTTA TGTAATAAT  
ATGGTAACAA GTAAATTCAC ATATAATAAT AGACGTTAA GAATATATGT CTTTAGGTGA TGTTAACTTG  
CATGGATCAA TAAATTACA

(SEQ ID NO 122)

48/103

Figure 48

TAAGGATAAG GAAGAAGCCT GAGAAGGTTT CTGACTAGGT TGGGCAAGCA TTTATATGTA AGAGCAAGCA  
TTCTATTCA TTTGTGTTGT TAAGAGTAGC GTGGTGAGGA CGAGACATAT AGTTGTGAT CAAGTATGTT  
ATTGTAAGA AATAATCATG GTAACAAGTA TATTCACGC ATAATAAG ACGTTAAGA GTATTTGTC  
TTTAGGTGAA GTGCTTGCAT GGATCTATAG AAATTACA

(SEQ ID NO 123)



49/103

Figure 49

CAAATGGAGT TTTTATTTT TATTATCTT AACACCCCAT TAAATTTTTC GGTGTTAAAA CCCAAATCAA  
TGTTTGGTCT CACAACTAAC ACATTTGGTC AGTTGTATC CAGTTCTGAA AGAATGTTT TGAACAGTTC  
TTTCAAAAC T GAAACGACA ATCTTCTAG TTCCAAAAT AATACCCAA GGATCAATAC AATAAGTTAC  
TAAGGGCTTA TGGT

(SEQ ID NO 124)

50/103

Figure 50

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CTAATGAAGT TTTTACTTTT TTCCTTTCAT CTTTAATAAA GATAAATACT AAACAAAACA TCAAAATCCA
TTTATTTATC GGTGGTAAAT TAAACCCAAA TCCCTGTTTG GTCTCACAAC TAACATAATT GGTGAGATTG
TATCCAGTTC TGAAAGAACA TTTCCGCTTC TTTCAAAACT GAAAACGACA ATCTTCTAG TTCCAAATAA
ATACCAAAGG ATCAATACAA TAAGTTACTA AGGCCTTAG GT
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(SEQ ID NO 125)

51/103

Figure 51

AACGAAAGAT TGACGATTGG TAAGAATCCA CAACAAGTTG TTCTTCATAG ATGTATCTGA GGGTCTGTAG  
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTCAAG TCTTGTCTAGA CCCACCATGA  
CTTTGACTGG TTGAAAGTTAT AGATAAAAGA TACATGATTG ATGATGTAAG CTGGGGACTT AGCTTAGTTG  
GTAGAGCGCC TGCTTTGCAC GCAGGAGGTC AGGAGTTCGA CTCCTCCTAGT CTCCACCAGA ACTTAAGATA  
AGTTCGGATT ACAGAAATTA GTAAATAAAG ATTGAGATCT TGGTTTATTA ACTTCTGTGA TTTCATTATC  
ACGGTAATTA GTGTGATCTG ACGAAGACAC ATTAACATCAT TAACAGATTG GCAAAATTGA GTCTGAAATA  
AATGTTCAC TCAAGAGTTT AGGTTAAGCA ATTAATCTAG ATGAATTGAG AACTAGCAAA TTAACCTGAAT  
CAAGCGTTT GGTATGTGAA TTTAGATTGA AGCTGTACAG TGCTTTAAGTG CACAGTGCCTC TAAACCTGAAA  
TGTTGAAGTT ACTAACTTGT AGGTAACATC GACTGTTTGG GGTGTGTAAT

(SEQ ID NO 126)

52/103

Figure 52

AACGAAAGAT TGACGATTGG TAAGAATCC<sup>3</sup>A CGACAAGTTG TTCTTCATAG ATGTATCTGA GGTCTGTAG  
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTCAAG TCTTGTCAGA CCCACCATGA  
CTTTGACTGG TTGAAGTTAT AGAAAAGAAAG ATACATAACT GATGATGTAA GCTGGGGACT TAGCTTAGTT  
GGTAGAGCGC CTGCTTTGCA CGCAGGAGGT CAGGAGTTCG ACTCTCCTAG TCTCCACCA

(SEQ ID NO 127)

53/103

Figure 53

AACGAAAGAT TGATGGCCGG TAAGAAATCCA CAACAAGTTG TTCTTCGAAG ATGTATCTGA EGGTCTGTAG  
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTCAAG TCTTGTGAGA CCCACCAAAT  
CTGAAAGATA TGTGTTTCAT TATGATTAAA GCTGGGGACT TAGCTAGTT GGTAGAGCGC CTGCTTTTGCA  
CGCAGGAGGT CAGGAGTTCC ACTCTCCTAG TCTCCACCA

(SEQ ID NO 128)

54/103

Figure 54

AACGAAAGAT TGACGATTGG TAAGAATCCA CAACAAGTTG TTCTTTCATGA CGATGTATCT GAGGGTCTGT  
AGCTCAGTTG GTTAGAGCAC ACGCTTGATA AGCGTGGGT CACAAGTTCA AGTCTTGTCA GACCCACCAA  
ATCTGACTAA CAAGCATTAT TAAATGCTGA ATACAGAAAA ACAGAGACAT TGACTTATTG ATAAGCTGGG  
GACTTAGCTT AGTTGGTAGA GCGCCTGCTT TGCACGCAGG AGGTCAGGAG TTCGACTCTC CTAGTCITCCA  
CCA

(SEQ ID NO 129)

55/103

Figure 55

AACGAAAGAT TGGTGACCCGG TAAGAAATCCA CAACAAGTTG TTCTTCGAAG ATGTATCTGA GGGTCTGTAG  
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTCAAG TCTTGTGAGA CCCACCACTA  
CTGACGAAGT GATGAATAAT CACAAGCTGC TAGATGAAAA GATA'TGTCGT TCATTATGAT TAAAGCTGGG  
GACTTAGCTT AGTTGGTAGA GCGCCTGCTT TGCACGCAGG AGGTCAGGAG TTCGACTCTC CTAGTCTCCA

CCA

(SEQ ID NO 130)

56/103

Figure 56

TAAGGAAGAT CGAGAAATTGG AAAGAGGTCC GATTATATCCG GATGATCCTT CTCCATCTTA TTAGAACATA  
GATCGCAGGC CAGTCAGCCT GACGATCGCT TGCAGGCGTG CCGCCTTCGT TTCCTCTTCT TCATTGTTGA  
TTGCTCACGG GCCGTACCGC AGCTGACGCT GCTGGCCCTG CGCAGGCGCG GCCCATCAGG GCCGACGGCC  
GGTCGGCCTT GCNAAGCTTC GCTTCGGGT GGATCTGTGG ATCGCGTAGT AGCGTTTGGG TCGGTATCTG  
GGCTTGAGC TCAGTTGGTT AGAGCACACG CTTGATAAGC GTGGGTCGG AGGTTCAAGT CCTCCCAGGC  
CCACCAAGTT ACTTGATGAG GGGCCGTAGC TCAGCTGGGA GAGCACCTGC TTGCAAGCA GGGGTCGTC  
GGTTCGATCC CGTCCGGCTC CACCATCATG TTGGTGTGGA GACGGATATT GGCANTCNAC AAAAGAAAGA  
AACAAAGTTG CGGACTNNTA CGAAAGTCTG CCTGTTCTGT ATGAAATCGT GAAGAGAAAGA TGTAAATCGGA  
TCAACTGAAG AGTTGATGTC GCAAGAAAGCT TGCTCAAGCC TTGCATAATG ATTGATGTGT TTAACCGCCA  
TCACCGATTG TATCTCGAGA AGCTGGTCTT TCTGCTGATA CTGTTGAAAC GAGCATTTGC AGTCGAATGG  
CAACATTCCG CGTCGCATAA TGGGCTTTA AGAGCTGAGT TTTGATGGAT ATTGGCAATG AGAGTGATCA  
AGTGTCTTAA GGGCATTTGGT GGATGCCCTG GCATGCAC

(SEQ ID NO 131)



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Figure 57

TAAGGAGGAT CGAGAAATTGG AAAGAGGCCG GATTATCCG GATGATCCTT CTCCATCTTA TTAGAACATA  
 GATCGCAGNC CAGTCAGCCT GACGATCGCT TGCAGGCCGTG CCGCCTTCGT TTCTCTTTCT TCAATTGTGA  
 TTGCTCACCG GCCGTACCGC AGCTGACGCT GCTGGCCCTG CGCAGGCCGG GNCCATCAGG GCCGACGGCC  
 GGTCCGCCCTT GCGAAGCTTC GCTTCGGGT GGATCTGTGG ATCGCGTAGT AGCGTTTGCG TCGGTATCTG  
 GGTGTGTAGC TCAGTTGGTT AGAGCACACG CTTGATAAGC GTGGGTCCG AGGTTCAAGT CCTCCCAGGC  
 CCACCAAGTT ACTTGATGAG GGGCCGTAGC TCAGCTGGGA GAGCACCTGC TTTGCAAGCA GGGGTCTGTC  
 GGTTCGATCC CGTCCGGCTC CACCATCATG TTGGTGTGA GACGGATATT GGCAATCAAC AAAAGAAAAGA  
 AACAAAGTTG CGGACTNNTA CGAAAGTCTG CCTGTTCTGT ATGAAATCGT GAAGAGAAAGA TGTAAATCGGA  
 TCAACTGAAG AGTTGATGTC GCAAGAAGCT TGCTCAAGCC TTGCATAATG ATTGATGTGT TTAACCGCCA  
 TCACCGATTG TATCTCGAGA AGCTGGTCTT TCTGCTGATA CTGTTGAAAC GAGCATTTGC AGTCGAATGG  
 CAACATTCCG CGTCGCATAA TCGGCTTTA AGAGCTGAGT TTTGATGGAT ATTGGCAATG AGAGTGATCA  
 AGTGTCTTAA GGGCATTTGGT GGATGCCCTTG GCATGCAC

(SEQ ID NO 132)

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Figure 58

CCTTAAAGAA	CTGTTCTTTG	CAGTGCTCAC	ACAGATTGTC	TGATGAAAAG	TAAATAGCAA	GGCGTCTTGC
GAAGCAGACT	GATACGTCCC	CTTCGTCTAG	AGGCCCAGGA	CACCGCCCTT	TCACGGCGGT	AACAGGGGTT
CGAATCCCT	AGGGACGCC	ACTTGCGCGG	TAATGTGTGA	AAGCGTTGCC	ATCAGTATCT	CAAAACTGAC
TTACCGAGTCA	CGTTTGAGAT	ATTTGCTCTT	TAAAATCTG	GATCAAGCTG	AAAATTGAAA	CACAGAACAA
CGAAAGTTGT	TCGTGAGTCT	CTCAAATTTT	CGCAACACGA	TGATGAATCG	TAAGAAACAT	CTTCGGGGTTG
TGA						

(SEQ ID NO 133)

59/103

Figure 59

CCTTAAAGAA CTGTTCTTTG CAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA  
GGCTTGTAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG TGGTCAAGT CCACTCAGGC  
CTACCAAAAT TTCCCTGAAT ACTGCCGTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTCACCG  
CCTTGCTCTCA GGAAAAATTA TCGGTAAGA GGTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA  
GCGCCTGCTT TGCACGCAGG AGGCTGCGG TTCGATCCCG CATAGCTCCA CCATACTGTG AGTGTTTACG  
AAAAAATACT TCAGAGTGTA CCTGAAACGG TTCACTGCGA AGTTTGTCTC TTAAAAAATC TGGATCAAGC  
TGAAAAATTGA AACACAGAAC AACGAAAGTT GTTCGTGAGT CTCTCAAAT TTCGCAACAC GATGATGAAT  
CGTAAGAAAC ATCTTCGGGT TGTGA

(SEQ ID NO 134)

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Figure 60

CCTTAAAGAA GCGTACTTTG CAGTGCTCAC ACAGATTGTC TGATGAAAAG TAAATAGCAA GCGTCTTGC  
GAAGCAGACT GATACGTCCC CTTCGTCTAG AGGCCCAGGA CACCGCCCTT TCACGGCGGT AACAGGGTT  
CGAATCCCCT AGGGACGCC ACTTGCGCGG TAATGTGTGA AAGCGTGGCC ATCAGTATCT CAAAAC TGAC  
TTACGAGTCA CGTTTGAGAT ATTTGCTCTT TAAAAATCTG GATCAAGCTG AAAAT TGAAC CACAGAACA  
CGAAAGTTGT TCGTGAGTCT CTCAAATTTT CGCAACACGA TGATGAATCG TAAGAAACAT CTTCCGGGTTG  
TGA

(SEQ ID NO 135)

61/103

Figure 61

CCTTAAAGAA CTGTTCTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA  
GGCTTGTAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG TGGTTCAAGT CCACTCAGGC  
CTACCCAAAT TTCCCTGAAT ACTGCGTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTCCACG  
CCTTGCTCTCA GGAAAAATTA TCGGTAAAGA GGTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA  
GCGCCTGCTT TGCACGCAGG AGTCTGCGG TTCGATCCCG CATAGCTCCA CCATCTCGTG AGTGTTTACG  
AAAAAATACT TCAGAGTGTA CCTGAAAGGG TTCACCTGCGA AGTTTTCCTC TTTAAAAATC TGGATCAAGC  
TGAAAAATTGA AACACAGAAC AACGAAAGTT GTTCGTGAGT CTCTCAAAAT TTCGCAACAC G

(SEQ ID NO 136)

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Figure 62

CCTTAAAGAA GCGTACTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAG TGAATAGCAA GGCGTCTTGC  
GATTGAGACT TCAGTGTTCCC CTTGCTCTAG AGGCCCAGGA CACCGCCCTT TCACGGCGGT AACAGGGGTT  
CGAATCCCCCT AGGGGACGCC AGCGTTCAAA CTGATGAGGT CAAACCTCCA GGGACGCCAC TTGCTGGTTT  
GTGAGTGAAA GTCACCTGCC TTAATATCTC AAAACTGACT TACGAGTCAC GTTTGAGATA TTTGCTCTTT  
AAAAATCTGG ATCAAGCTGA AAATTGAAAC ACAGAACCAAC GAAAGTTGTT CGTGAGTCTC TCAAATTTTC  
GCAACACGAT GATGAATCGT AAGAAACATC TTCGGGTTGT GA

(SEQ ID NO 137)

63/103

Figure 63

CCTTAAAGAA ACGGTCTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA  
GGCTTGTAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG TGGTTCAAGT CCACTCAGGC  
CTACCAAATT TTCCCTGAAT ACTGCGTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTCCACG  
CCTTGCTCA GGAAAAATTA TCGGTAAAGA GGTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA  
GCGCCTGCTT TGCACGCAGG AGGTCTGCGG TTCGATCCCG CATAGCTCCA CCATCTCGTG AGTGTTTACG  
AAAAAATACT TCAGAGTGTA CCTGAAAGGG TTCACTGCCA AGTTTTCGTC TTAAAAAATC TGGATCAAGC  
TGAAAAATTGA AACACAGAAC AACGAAAGTT GTTCGTGAGT CTCTCAAAAT TTCCGCAACAC GATGATGAAAT  
CGTAAGAAAC ATCTTCGGGT TGTGA

(SEQ ID NO 138)

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Figure 64

CTAAGGATAT ATTGGGAACA TCTTCTTCGG AAGATGCGGA ATAACGTGAC ATATTGTATT CAGTTTGTGAA  
TGTTTATTTA ACATTCAAAT ATTTTTCGGT TAAAGTGATA TTGCTTTTGA AAATAAAGCA GTATGCGAGC  
GCTTGACTAA AAAAAATGT ACATTGAAA CTAGATAAGT AAGTAAAAA TAGATTTTAC CAAGCAAAAC  
CGAGTGAATA AAGAGTTTAA AATAAGCTTG AATTCATAAG AAATAATCGC TAGTGTTTCA AAGAACAACCTC  
ACAAGATTAA TAACGCGGTTT AAATCTTTT ATAAAAGAAC GTAACGTTT GACTTATATAA  
AATGGTGAA ACATA

(SEQ ID NO 139)



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Figure 65

CTAAGGATAT ATTCGGAACA TCTTCTTCAG AAGATGCGGA ATAACGTGAC ATATTGTATT CAGTTTGTAA  
TGTTTATTTA ACATTCAAAAT ATTTTTCGCT TAAAGTGATA TTGCTTATGC GAGCNCTTGA CAACTCTATTC  
TTTCTTAAAGA AAGCGCTTGT CAGACAAATGC ATTAAGAANA AATAAAGCGG AGTTTACCTT TGTAAAATGAG  
CATTTGATTT TTTGAAAATA AAGCAGTATG CGAGCGCTTG ACIAAANAAGA AATGTACAT TGAANAACTAG  
ATAAGTAAGT AAAATATAGA TTTTACCAAG CAAAACCGAG TGAATAAAGA GTTTTAAATA AGCTTGAAAT  
CATAAGAAAAT AATCGCTAGT GTTCGAAAAGA ACACTCACAA GATTAATAAC GCGTTTAAAT CTTTTFATAA  
AAGAAAACGT TTAGCAGACA ATGAGTTAAA TTATTTTAAA GCAGAGTTTA CTTATGTAAA TGAGCATTTA  
AAATAATGAA AACGAAGCCG TATGTGAGCA TTTGACTTAT AAAAATGGTG GAAACATA

(SEQ ID NO 140)

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Figure 66

CTAAGGATAT	ATTCGGAACA	TCTTCTTCAG	AAGATGCGGA	ATAACGTGAC	ATATTGTATT	CAGTTTGGAA
TGTTTATTTA	ACATTCAAAT	ATTTTTTGGT	TAAAGTGATA	TTGCTTATGC	GAGCGCTTGA	CAATCTATTTC
TTTTTAAAGA	AAGCGGTTGT	CAGACAATGC	ATTAAGAAAA	ATTAAGCGCG	AGTTTACTTT	TGTAAATGAG
CATTTGATTT	TTTGAAAAATA	AAGCAGTATG	CGAGCGCTTG	ACTAAAAANGA	AATTGTACAT	TGAAAAACTAG
ATAAGTAAGT	AAATATAGA	TTTTTACCAAG	CAAAACCGAG	TGAATAAAGA	GTTTTTGAATA	AGCTTGAATT
CATAAGAAAT	AATCGCTAGT	GTTCGAAAGA	ACACTCACAA	GATTAAATAAC	GCGTTTAAAT	CTTTTATATA
AAGAACGTAA	CTTCATGTTA	ACGTTTGACT	TATAAAAATG	GTGGAACACAT	A	

(SEQ ID NO 141)

67/103

Figure 67

CTAAGGATAT ATTGGGAACA TCTTCTTCAG AAGATGCGGA ATAACGTGAC ATATTGTATT CAGNTTTGAA  
TGTTTATTTA ACATTCAAAA AATGGGCCCTA TAGCTCAGCT GGTAGAGCG CACGCCCTGAT AAGCGTGAGG  
TCGGTGGTTC GAGTCCACTT AGGCCACCCA TTATTGTAC ATTGAAAACCT AGATAAGTAA GTAAAAATATA  
GATTTTACCA AGCAAAACCG AGTGAATAAA GAGTTTTAAA TAAGCTTGAA TTCATAAGAA ATAATCGCTA  
GTGTTTCGAA GAACACTCAC AAGATTAAATA ACGCGTTTAA ATCTTTTAT AAAAGAACGT AACTTCATGT  
TAACGTTTGA CTTATAAAAA TGGTGGAAAC ATA

(SEQ ID NO 142)

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Figure 68

CTAAGGATAT ATTCCGGAACA TCTTCYTCAG AAGATGCCGA ATAAATGTGAC ATATTGTATT CAGTTTGGAA  
TGTTTATTTA ACATTCAAAT ATTTTITGGT TAAAGTGATA TTGCTTATGC GAGCGCTTGA CTAAAAAGAA  
ATTGTACATT GAAAACTAGA TAAAGTAAGTA AANTATAGA TTTTACCAAG CAAACCCGAG TGAAT'AAAGA  
GTTTAAATA AGCTTGAATT CATAAGAAAT AATCGCTAGT GTTCGAAAGA ACACTCACAA GATTAATAAC  
GCGTTTAAAT CTTTTTATAA AAGAACGTAA CTTCATGTTA ACGTTTGACT TATAAAAATG GTGGAAACAT

A

(SEQ ID NO 143)

69/103

Figure 62

CTAAGGATAT ATTCGGAACA TCTTCTACGA AGATGAGGGA ATAACGTGAC ATATGTATT CAGTTTGTGAA  
TGTTTATTAA CATTCAATTG TACATTGAAA ACTAGATAAG TAAGTAAGAT TTTACCAAGC AAAACCGAGT  
GAATAGAGTT TTAATAAAGC TTGAATTTCAT AAATAATCGC TAGTGTTTCA AAGACNTCCA CAAGATTAAAT  
AACTAGTTTT AGCTATTAT TTTGAATAAC AATCAAAAT ATGGTGGGAC ATA

(SEQ ID NO 144)

70/103

Figure 70

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AAGGATAAGG AACTGCACAT TGGTCTTGTT TAGTCTTGAG AGGTCTTG TG GGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAT AAACCGAAAA CGCTGTAGTA
TTAATAAAGA GTTTATGACT GAAAGGTCAA AAAATAA
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(SEQ ID NO 145)

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Figure 71

AAGGAAATGG AACACGTTTA TCGTCTTATT TAGTTTGTAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA  
GAGCGCCTGC TTNGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATCAGGATA CANTCCTACT  
AAACTTAATA CAAGTGAAGT TGAACACGCA ACTCACTTCC TAGGAAAATA GACAATCTTC GCTTGTGTGC  
AAGGCACACA TGGTCAGATT CCTAATTTTC TACAGAAAGT TCGCTAAAGC GAGCGTTGCT TAGTATCCTA  
TATAATAGTC CATNGAAAAT TGAATATCTA TATCAAAATTC CACGATCTAG AAATAGATTG TGGAAAACGTA  
ACAAGAAATT AACCCGNAAA CGCTG

(SEQ ID NO 146)

72/103

Figure 72

AAGGATAAGG AACTGCACAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA  
GAGCGCCTGC TTTGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTGGTGAG AGATCACCAA  
GTAATGCACA TTGAAAATTG AATATCTATA TCAAATAGTA ACAAGAAAAT AAACCGAAAC GCTGTAGTAT  
TAAAAGAGTT TATGACTGAA AGGTCAGAAA ATAA

(SEQ ID NO 147)



73/103

Figure 73

CTAAGGATAT ATTGGGAACA TCTTCTTACG AAGATGCAGG AATAACATTG ACATATTGTA TTCAGNTGTG  
AATGCTCAT T GGAGNATTCA TNGCATNATT TGGTNCATTG ACANCTAGAT AAGNAAGTAA AATTATGAT  
TTTACCAAGC AAAACCGAGT GAATTAGAGT TNTNNAACAA GCTTTGATTT CAAAAAGAAA TAATCGCTAG  
TGTTTCGAAAG AACACTCACA GATTANTAAC ATCTTGGGTT TTCACCCGAC TTGTTCTGNT CGAAAGTCAA  
AAAA

(SEQ ID NO 148)

74/103

Figure 74

AAGGATAAGG AACTGCGCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA  
GAGCGCCTGC TTGACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC . CATGGTGAG AGATCACCAA  
GTAATGCACA TTGAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAT AAACCGAAAA CGCTGTAGTA  
TTAATAAGAG TTTATGACTG AAAGGTCAAA AAATAA

(SEQ ID NO 149)

Figure 75

AAGGATAAGG AACTGCCGAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTTG GGGCCTTAGC TCAGCTGGGA  
GAGCGCCTGC TTTGCAACGCA GGAGGTCAGC GGTTCGATCC CGCTAGGCTC CATTTGGTGAG AGATCACCAA  
GTAATGCACA TTGAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAT AAACCGAAAA CGCTGTAGTA  
TTAATAAGAG TTTATGACTG AAAGGTCAGA AAAATAA

(SEQ ID NO 150)

Figure 76

AAGGAAAAGG AACTGCCGAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA  
GAGCGCCTGC TTTGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATGGTGAG AGATCACCAG  
GTAATGCACA TTGAAAATTG AATATCTATA TCAATAGTA ACAAGAAAAT AAACCGAAA CGCTGTAGTA  
TTAATAAGAG TTTATGACTG AAAGGTCAGA AAAATAA

(SEQ ID NO 151)

77/103

Figure 77

AAGGATAAGG AACTGCCGCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTC GGGCCTTAGC TCAGCTGGGA  
GACCGCCTGC TTTGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTTGGTGAG AGATCACCAA  
GTAATGCACA TTGAAAATTG AATATCTATA TCAAATAGTA ACAAGAAAAT AAACCGAAAC GCTGTAGTAT  
TAAAAGAGTT TATGACTGAA AGTCAGAAA ATAA

(SEQ ID NO 152)

78/103

Figure 78

AAGGATAAGG AACTGCGCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA  
GAGCGCCTGC TTTGACGCA GGAGGTCAGC GGTCGATCC CGTAGGCTC CATTGGTGAG AGATCACCAC  
GTAATGCACA TTGAAAATTG AATATCTATA TCAAATAGTA ACAAGAAAT AACCGAAAC GCTGTAGTAT  
TAAAGAGTT TATGACTGAA AGGTCAAAA TAA

(SEQ ID NO 153)

SUBSTITUTE SHEET (RULE 26)

Figure 79

TAAGGAAGAT CGAGAAATGG AAAGAGGTCG GATTATCCG GATGATCCTT CTCCATCTTA TTAGAACATA  
 GATCGCAGGC CAGTCAGCCT GACGATCGCT TGCAGGCGTG CCGCCTTTCGT TTCTCTTTTCT TCATTTGTTGA  
 TTGCTCACGG GCCGTACCGC AGCTGACGCT GCTGGCCCTG CGCAGGCGG GCCCATCAGG GCCGAACGGC  
 CGGTCGGCCT TGCNAAGCTT CGCTTCGGGG TGGATCTGTG GATCGCGTAG TAGCGTTTGC GTCGGTATCT  
 GGGCTGTAG CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCG GAGGTCAAG TCCTCCCCAGG  
 CCCACCAAGT TACTTGATGA GGGGCCGTAG CTCAGCTGGG AGAGCACCTG CTTTGCAAGC AGGGGGTCGT  
 CGGTTTCGATC CCGTCCGGCT CCACCATCAT GTTGGTGTG AGACGGATAT TGGCAATCAA CAAAAGAAAG  
 AAACAAGTT GCGGACTNNT ACGAAAGTCT GCCTGTTCTG TATGAAATCG TGAAGAGAAG ATGTAATCGG  
 ATCAACTGAA GAGTTGATGT CGCAAGAAGC TTGCTCAAGC CTTGCATAAT GATTGATGT TTTAACCGCC  
 ATCACCATT GTATCTCGAG AAGCTGGTCT TTCTGCTGAT ACTGTTGAAA CGAGCATTTG CAGTCGAATG  
 GCAACATTCG GCGTCGCATA ATGCGGCTTT AAGAGCTGAG TTTTGATGGA TATTGGCAAT GAGAGTGATC  
 AAGTGCTTA AGGCAATTGG TGGATGCCCTT GGCATGCAC

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(SEQ ID NO 154)

Figure 80

AAGGAGCACCC ACGAGAAACA CTCCAATTGG TGGGGTGTAAGCCGTGAGGG GTTC'TCGTCT GTAGTGGACG  
GAAGCCGGGT GCACAACAAC AAGCAAGCCA GACACACTAT TGGGTCCCTGA GGCAACATCT CTGTTGGTTT  
CGGATGTTG TCCACCATC TTGGTGGTGG GGTGTGGTGT TTGAGAAATG GATAGTGGTT GCGAGCATCA  
ATTGGATGCG CTGCCTTTGG GTGGCGTGTT CTGTGTGTGCA ATTTAATTCT TTGGTTTTGG TGTTTAT

(SEQ ID NO 157)



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Figure 81

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ANGGAGCACCC ACGAGAAACA CCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAACAAC AGGCAATCGC CGGACACACT ATGGGCCCT GAGACAACAC TCGGCCGACT
GAGGTCGACG TGGTGTCCTT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATTGAATAG TGGTTGCCGAG
CATCTAGCCG GATGCGTTCC CCAGTGGTGC GCGTTCGTCA AAAATGTGTA ATTTTCTCTT TGGT'TTTTGT
GTTCGT
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(SEQ ID NO 158)

Figure 82

AAGGAGCACC ACGAGAAACA CCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AGGGCCGGGT GCACAACAAC AGGCAATCGC CGGACACACT ATTGGGCCCT GAGACAACAC TCGGCCGACT  
GAGGTCGACG TGGTGTCCCT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATTTGAATAG TGGTTGCCGAG  
CATCTAGACG GATGCCGTTCC CCAGTGGTGC GCGTTCGTCA AAAATGTGTA ATTTTCTTTT TGGTTTTTGT  
GTTTCGT

(SEQ ID NO 159)

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Figure 83

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AAGGAGCACC ACGAGAAACA CCCCATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGNNCGGGT NNACAACAAC NGCCAATCGC CGGACACACT ATTGGGNCCT GAGACAACAC TCGGCCGACT
GAGGTCGACG TGGTGTCCCT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATTGAATAG TGGTTGCCGAG
CATCTAGCCG GATGCGTTCC CCAGTGGTGC GCGTTCGTCA AAAATGTGTA ATTTTCTCNT TGGTTTTTGT
GTTTCGT
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(SEQ ID NO 160)

84/103

Figure 84

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AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGAGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAACAGC AGACATTCGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGCCGACT
TTGGTTCGACG TGGTGTCCTT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATGAATAG TGGTTGCGAG
CATCTAGACG GATGCGTTGC CCTCGGGCCG CGTGTTCTGC AAAAATGTGT AATTTTCTT TTTGGTTT
```

(SEQ ID NO 161)

85/103

Figure 85

AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGAGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
GGAGCCGGGT GCACAAACAC AGCAATCGC CAGACACACT ATTGGGCCCC GAGACAACAC TCGGCCGGCT  
TTGAGTCGAA GTGGTGTCCT TCCATCTTGG TGGTGGGGTG TGGTGTTTGA GCATTGAATA GTGGTTGCGA  
GCATCTAGAC GGATGCGTTG CCTTCGGGCC GCGTGTTCGT CAAAATGTG TAATTTTTC TTTTGGTTT

TGTGTTCT

(SEQ ID NO 162)

86/103

Figure 86

AGGAGCACC GNAACGCAT CCCGCGTGGG GTGTGGGTTT GCGTGTGTGT GCGTCGNC CGAGGTGTGTG  
GGCAGCAGGC AGTAACCNCC GGAACACTGT TGGGTTTGA GNNAACACCCC GTGGTGGTGT TGTGCTCCCC  
GTGGTGNCGG GGTGTGGTGT TTGAGTGTGT GATAGTGGTT GCGAGCATCT GGCAAAGACT GTGGTAAGCG  
GTTTTTGTG ANTGTTTCT GGTGTGTGT

(SEQ ID NO 163)

87/103

Figure 87

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AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGACG
AGGNCGGGT GCACAACAAC AGNCAATCGC CAGACACACT ATTGNCCTT GAGACAACAC TCGGCCGACT
TNGGTTGAAG TGGTGTCCT CCATCTTGGT GGTTTGTGAG GGTGTTGAG TATTGGATAG TGGTTGCGAG
CATCTAANTG AACGCGTCGC CGNCAACGGT TACGTGTTTCG TTTTGTGTAA TTNTTCTAT TGGTTTGTGT
GTTTCGT
```

(SEQ ID NO 164)

88/103

Figure 88

AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AGGGCCGGGT GCACAACAAC AGGCAATCGC CAGACACACT ATTGNCCTT GAGACACAC TCGGCCGACT  
TTGGTCGAAG TGGTGTCCCC CCATCTTGGT GGTGGGGTGT GGTGTTTGAG TATTGGATAG TGGTTGCGAA  
CATCTAAATG AACGCGTTGC CGGCAACGGT TACGTGTTCC TTTTAGTGTA ATTNTTCTA ATGGTTTTTG  
TGTTTCGT

(SEQ ID NO 165)

SUBSTITUTE SHEET (RULE 26)



89/103

Figure 89

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AAGGAGCACC ACGAGACCCTG GGCCGGGCCCC GCAGATCGCG GGATCAGCTG AGCTTTCAGG CGATTCGTTG
GATGGCCCTCG CACCTGTAGT GGGTGGGGGT CTGGTGCACT CAACAAACTT GCGGTGGGAT GCGGGAAGC
ATCTGCCGGA AATCATCAGA CACACTATTG GGCTTTGAGA CAACAGGCC CCAGNCCTGN CCCGTTGGGG
GCAGNGGGTG TGTGTTGCC TCACCTTGGT GGTTGGGGTG GTGTTTGA TT TGTGATAGT GGTTCGAGC
ATCTAGCGCG CAGAAATGTGT GGTCTCCTC CTGTGGGTG GGCCTGGTT TTGTGTGCGA TTGATGTGCA
ATTTCTTTTG AAATCATTT TTTGGTTTTT GTGTTGT
```

(SEQ ID NO 166)

90/103

Figure 20

AAGGAGCACC ACGAAAAACT CCCCAATTGG TGGGGTGTAA GCCGTGAGGG GTTCCCCTCT GTAGTGGACG  
GGGGCCGGGT CCGCAACAGC AAGCGAAACG CCGGACACAC TATTGGGTCC TGAGGCAACA CTCGGGTTTG  
TCCCCCTCAG GGATTCTG GGTGTTGTCC CACCATCTTG GTGGTGGGT GTGGTGTG AGAATTGGAT  
AGTGGTTGCG AGCATCAAAAT GGATGCCGTTG CCCCTACGGG TAGCGTGTTC TTTTGTGCAA TTTTATTCNT  
TGGTTTTTGT GTTTGT

(SEQ ID NO 167)

91/103

Figure 91

AAGGAGCACC ACGAGAAGCA CTCCAACTGG TGGGGTGCAA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG  
AGAGCCGGGT GCGCGACAAC GAACGAGCCA GACACACTAT TGGGTCCTGA GGCAACACTC GGGCTTGGCC  
AGAGCTGTTG TCCCACCATC TTGGTGGTGG GGTGTGGTGT TTGAGAAATG GATAGTGGTT GCGAGCATCA  
AATGGATGCG TTGCCCCCTAC GGGTGGCGTG TTCTTTTGTG CAATTTATTT CTTTGGTTT TGTGTTTGT

(SEQ ID NO 168)

92/103

Figure 22

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AAGGAGCACC ACGAAAAACA CCCAACTGG TGGGGTGTAA GCCGTGAGGG GCTCCCGTCT GTAGTAGACG
GGCGCCGGGT GCGCAACAGC AAGCGAGCCA GACACACTAT TGGGTCCCTGA GGCAACACTC GGGCTTGTCT
TGGA CTGTC CAAGAGTGTT GTCCCACCCAT CTTGGTGGTG GGGTGTGGTG TTTGAGAAAT GGATAGTGGT
TGCAGCATC ANCTGGATGC GTTGCCCCCA GGGTAGCGT GTTCTTTTGT GCAATTTAT TCNNTGGTTT
TTGTGTAGT
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(SEQ ID NO 169)

93/103

Figure 93

AAGGAGCACC ACGAAAACA CTCCGCATCC GGTGGGGTGT GAGCCGTGAG GGAGCCCCTG CCTGTAGTGG  
GTGTGGGTTG GGTGCCCGAC AACAAATGGG AAAAATCGCT GGGCACACTA TTGGGCTTTG AGGCAACACC  
TGGTTTGT TTGGTGGTGT CGCTCCATCT TGGTGGTGGG GTGTGGTGT TGAGTTGTGG ATAGTGGTTG  
CGAGCATCTA AGCAAAAGCT GTTGTTTTGAC GGTTTTGTG GAGTGTGTG TGTGT

(SEQ ID NO 170)

94/103

Figure 94

AAGGAGCACC ACGAAAAACA CTCCAATTGG TGGGGTGTAAGCCGTGAGGG GTTCTCATCT GTAGTGGACG  
AGAGCCGGGT GCACAACAGC AATGAATCG CCAGACACAC TGTTGGGTCC TGAGGCAACA CTCAGGCTTG  
TCCCATGTTG GGCTTGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGT GTGGTGTG AGTATTGGAT  
AGTGGTTGCG AGCATCTAAA TGGATACGTT GCCAGTAATG GTGGCGTATT CATTGAAAT GTGTAATTTT  
CTTCTTTGGT TTTGTGTGT

(SEQ ID NO 171)

95/103

Figure 95

AAGGAGCACC ACGAAAAACA CTCCAATTGG TGGGGTGTA GCGGTGAGGG GTTCATCATCT GTAGTGGACG  
AGAGCCGGGT GCACAACAGC AATGAATCG CCAGACACAC TGTGGGTCC TGAGGCAACA CTCAGGCTTG  
TCCCATGTTG GGCTTGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGT GTGGTGTG AGTATTGGAT  
AGTGGTTGCG AGCATCTAAA TGGATACGTT GCCAGTAATG GTGGCGTGT CATGAAAAT GTGTAATTTT  
CTTCTTTGGT TTTGTGTGT

(SEQ ID NO 172)

96/103

Figure 96

AAGGAGCACC ACGAAAAACA CTCCAATTGG TGGGGTGTA GCGGTGAGGG GTTCTCATCT GTAGTGGACG  
AGAGCCGGGT GCACAACAGC AATGAATCG CCAGACACAC TGT'TGGGTCC TGAGGCAACA CTCAGGCTTG  
TCCCATGTG GGT'TGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGGT GTGGTGT'TG AGTAT'TGGAT  
AGTGGTTGCG AGCATCTAAA TGGANACGTT GCCAGTAATG GTGGCCGTGTT CAT'TGAAAAT GTGTAAT'TTT  
CTTCTTTGGT TTTGTGTGT

(SEQ ID NO 173)



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Figure 97

AAGGAGCACC	ATTTCCTCAGT	CGAATGAACT	GAGAACATAA	AGCGAGTATC	TGTAGTGGAT	ACATGCTTGG
TGAATATGTT	TTATAAATCC	TGTCCACCCC	GTGGATAGGT	AGTCGGCAAA	ACGTCGGACT	GTCATAAGAA
TTGAAACGCT	GGCACACTGT	TGGGTCCTGA	GGCAACACAT	TGTGTTGTCA	CCCTGCTTGG	TGGTGGGGTG
TGGTCCTTGA	CTTATGGATA	GTGGTTGCGA	GCATCTAAAC	ATAGCCTCGC	TCGTTTTCGA	GTGAGGCTGG
TTTTTGCAAT	TTTATTAGCT					

(SEQ ID NO 174)

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Figure 98

CCTAATGATA TTGATTCCGG TGAAGTGCTC ACACAGATTG TCTGATGAAA AAGTAACGAG CAGAAATACC  
TTTATAGGCT TGTAGCTCAG GTGGTTAGAG CGCACCCCTG ATAAGGGTGA GGTCCGGTGGT TCAAGTCCAC  
TCAGGCCCTAC CACTTCTCGA AGTGGAAAAG GTACTGCACG TGACTGTATG GGGCTATAGC TCAGCTGGGA  
GAGCGCCTGC CTTGCACGCA GGAGGTCAGC GGTTCGATCC CGCTTAGCTC CACCATAATAG TCCTGTATTT  
CAATACTTCA GAGTGTA CTG GCAACAGTAT GCTGCGAAGT ATTTTGCCTT TTAACAATCT GGAACAAGCT  
GAAAATTGAA ACATGACAGC TGAAACTTAT CCTCCGTAG AAGTATTTGGG GTAAAGGATTA ACCTGTCTATA  
GAGTCTCTCA AATGTAGCAG CACGAAAGTG GAAACACCTT CGGGTTGTGA

(SEQ ID NO 195)

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Figure 99

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CCTAATGATA TTGATTCGCG TGAAGTGCTC ACACAGATTG TTTGATAGAA ACGTAATGAG CAAAAGCGCT
ACCTGTTGAT GTAATGAGTC ACTGACTCAT GCTGATACGA ACCGATTAAAG ACAGTCAGTT TAATCGGATT
TTCGTGTCCC CATCGTCTAG AGGCCTAGGA CACTGCCCTT TCACGGCTGT AACAGGGGTT CGAATCCCCT
TGGGGACGCC ATTCGATAAT GAGTGAAGA CATTATCACC GGTTC'TTGA ACCGAAAACA TCTTAAAGAT
GACTCTTGCG AGTCGTGTTT AAGATATTGC TCTTTAACAA TCTGGAACAA GCTGAAAATT GAAACATGAC
AGCTGAAACT TATCCCTCCG TAGAAGTATT GGGTAAGGA TTAACCTGTC ATAGAGTCTC TCAAAATGTAG
CAGCACGAAA GTGGAACAC CTTCCGGGTTG TGA
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(SEQ ID NO 196)

100/103

Figure 100

TAAGGATAAG GAAGAAGCCT GAGAAGGTTT CTGACTAGGT TGGGCAAGCA TTTATATGTA AGAGCAAGCA  
TTCTATTCA TTTGTGTTGT TAAGAGTAGC GCGGTGAGGA CGAGACATAT AGTTGTGAT CAAGTATGTT  
ATTGTAAAGA AATAATCATG GTAACAAGTA TATTCACGC ATAATAATAG ACGTTTAAGA GTATTTGTCT  
TTAGGTGAA GTGCTGCAT GGATCTATAG AAATTACA

(SEQ ID NO 197)

101/103

Figure 101

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TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTTG AGAGGTTTCA CTCTCAAAAC
GTGTTCTTTG AAAACTAGAT AAGAAAAGTT AGTGTA AAAA GACGAAGAGA AACCGTAGGT TTTTCTTCAA
CCAAAACCGA GAATCAAACC GAGAAAGAAT CTTTCCGTTT TCATAAGCGA TCGCACGTTT ATGAAAACAC
AACAAACACCT TCGTAAGAAG GATGA
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(SEQ ID NO 213)

102/103

Figure 102

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TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTGG AGAGGTCAAT GACGCTCATA
CTGAGTACCA GGTGACACCGT TTTTGAGGTG TCTCTTCGTA TGAGGGGCCCT ATAGCTCAGC TGGTTAGAGC
GCACGCCCTGA TAAGCGTGAG GTCGGTGGTT CGAGTCCACT TAGGCCCACT TTTTGAATA AACCTTCTT
TTTATATATG TAATAAGGGG CCTTAGCTCA GCTGGGAGAG CGCTGCTTT GCACGCAGGA GGTGCGCGGT
TCGATCCCGC TAGGCTCCAC CAAAGATAGT TTGTTCTTTG AAACTAGAT AAGAAAAGTT AGTGTA AAAA
GACGAAGAGA AACCGTAGGT TTTTCTTCAA CCAAAACCGA GAATCAAACC GAGAAAGAAT CTTTCCGTTT
TCATAAGCGA TCGCACGTTT ATGAAACAC AACACACCT TCGTAAGAAG GATGA
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(SEQ ID NO 214)

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Figure 103

TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTGG AGAGGTCAAT GACGCTCATA  
CTGAGTACCA GGTGACACGT TTTTGAGGTG TCTCTTCGTA TGAGGGGCCT ATAGCTCAGC TGGTTAGAGC  
GCACGCCCTGA TAAGCGTGAG GTCGGTGGTT CGAGTCCACT TAGGCCCACT TTTTGTGAATA AACCTTTCTT  
TTTTATATGT TAATAAGGGG CCTTAGCTCA GCTGGGAGAG CGCCTGCTTT GCACGCAGGA GGTCAGCGGT  
TCGATCCCCG TAGGCTCCAC CAAAGATAGT TTGTTCTTTG AAACTAGAT AAGAAAAAGTT AGTGTA AAAA  
GACGAAGAGA AACCGTAGGT TTTTCTTCAA CCAAAACCGA GAAAGAATCT TTCCGTTTTC ATAAGCGATC  
GCACGTTTAT GAAACACAA CAACACCTTC GTAAGAAGGA TGA

(SEQ ID NO 215)